### contd

hydroxy, or two adjacent  $R_1$  groups together with the carbon atoms to which they are attached forming a fused benzene ring.

- 6. Compounds according to claim 1, wherein  $R_1$  represents methoxy, fluoro, chloro, hydroxy, or two adjacent  $R_1$  groups together with the carbon atoms to which they are attached forming a fused benzene ring.
- 7. Compounds according to claim 1, wherein  $R_2$  is H or an alkyl group containing 1 to 3 carbon atoms.
- 8. Compounds according to claim 1, wherein  $R_3$  and  $R_4$ , which are the same or different, are H or methyl.
- 9. Compounds according to claim 1, wherein T is pyridyl, pyrimidinyl, pyrazinyl, phenyl, benzofuryl, 1,4-benzodioxanyl or quinazolinyl all optionally substituted by methoxy, trifluoromethyl, or halo.
- 10. Compounds according to claim 1, wherein T is 2-pyridyl, 2-pyrimidinyl, 2-pyrazinyl, phenyl, 2,3-dihydrobenzo [b] furan-7 yl, 1,4-benzodioxan-5-yl or 4-quinazolinyl all optionally substituted by methoxy, trifluoromethyl, or halo.
  - 11. Compounds according to claim 1, wherein  $R_5$  is H or methyl.
  - 12. Compounds according to claim 1, which are:
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (pyrazin-2-yl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (3-chloropyrid-2-yl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (quinazolin-4-yl) piperid-4-yl] methylamine;

# contd.

- N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (pyrid-2-yl) piperid-4-yl] methylamine; N- (8-Methoxy-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
- N- (1, 4-Benzodioxan-2-ylmethyl)-N'- [3- (trifluoromethyl)-2-pyridyl] ethanediamine;
- N- (8-Methoxy-1, 2, 3, 4-tetrahydronaphth-2-ylmethyl)-1- [1-pyrimidin-2-yl) piperid-4- yl] methylamine;
- 7- {B-[1-(Pyrimidin-2-yl) piperid-4-ylmethyl] aminomethyl}-5,{B-[1-(Pyrimidin-2-yl) piperid-4-ylmethyl] aminomethyl}-5, 6, 7, 8-tetrahydronaphth-1ol;
- N- (5-Methoxy-3, 4-dihydro-2H-1-benzopyran-3-ylmethyl)-1- [l-(pyrimidin-2-yl) piperid 4-yl] methylamine; N- (1, 4-Benzodioxan-2-ylmethyl)-1-(1-phenylpiperid-4-yl) methylamine;
- N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (1, 4-benzodioxan-5-yl) piperid-4yl] methylamine;
- 1- [1- (1, 4-Benzodioxan-2-ylmethyl) piperid-4-yl]-N- (2-methoxyphenyl) methylamine;
- N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (4-methoxyphenyl) piperid-4-yl] methylamine;
- N- (8-Methoxy-1, 4-benzodioxan-2-ylmethyl)-N- (2-methoxyphenyl)-1, 3-propanediamine;
- N- (1, 4-Benzodioxan-2-ylmethyl)-l- [l- (3-methoxyphenyl) piperid-4-yl] methylamine;
- N- (6, 7-Dichloro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
- N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-chlorophenyl) piperid-4-yl] methylamine;
- N- (5-Fluoro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
- N- (8-Fluoro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;

1- [1- (2-methoxyphenyl) piperid-4-yl]-N- (naphtho [1, 2-b] dioxan-2ylmethyl) methylamine; 1- [1- (2, 3-Dihydrobenzo [b] furan-7-yl) piperid-4-yl]-N- (8-methoxy-1, 4-benzodioxan-2- ylmethyl) methylamine;

N- (6-Chloro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;

N- (7-Chloro-1, 4-benzodioxan-2-ylmethyl)-1- (1- (2-methoxyphenyl) piperid-4yl] methylamine;

N- (8-hydroxy-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine; [and] <u>or</u> pharmaceutically acceptable salts thereof in the form of individual enantiomers, racemates, or other mixtures of enantiomers.

- 13. Compounds according to claim 12, which are:
- (S)- (-)-N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
- (R)- (+)-N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
- (-)-N- (1, 4-Benzodioxan-2-ylmethyl)-l- [l- (pyrid-2-yl) piperid-4-yl] methylamine dihydrochloride; or
- (+)-N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (pyrid-2-yl) piperid-4-yl] methylamine dihydrochloride.
- 14. A method for reducing cravings to food or an addictive substance, comprising:

administering a therapeutically effective amount of a compound of formula I

$$(R_1)_{g} \xrightarrow{A} \xrightarrow{R_2} U - Q - T$$

$$R_3$$

 $a^1$ 

or pharmaceutically acceptable salts thereof in the form of individual enantiomers, racemates, or other mixtures of enantiomers, in which:

A is-0-;

Bis-0-;

g is 0 or 1;

 $R_1$  represents halo, an alkyl group containing 1 to 3 carbon atoms, an alkoxy group containing 1 to 3 carbon atoms, or hydroxy;

R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are each H;

U is methylene;

Q is a group of formula Ila

or llc

$$X \longrightarrow V \longrightarrow N$$

in which V is methylene or ethylene; X is an alkylene chain containing 0 to 2 carbon atoms and X'is an alkylene chain containing 1 to 4 carbon atoms provided that the total number of carbon atoms in X and X' amounts to 3 or 4; and  $R_5$  is H; and T is pyridyl, pyrazinyl, phenyl, benzo [b] furanyl, 1,4-benzodioxanyl, or quinazolinyl all optionally substituted by methoxy, trifluoromethyl, or halo.

15. A method according to claim 14 wherein  $R_1$  represents methoxy, fluoro, chloro or hydroxy.

# $a^1$

- 16. A method according to claim 14, wherein T is 2pyridyl, 2-pyrazinyl, phenyl, 2, 3-dihydrobenzo [b] furan-7-yl, 1, 4-benzodioxan-5-yl or 4quinazolinyl all optionally substituted by methoxy, trifluoromethyl, or halo.
- 17. A method according to claim 14, wherein the compounds of formula 1 are selected from:
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (pyrazin-2-yl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (3-chloropyrid-2-yl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (quinazolin-4-yl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (pyrid-2-yl) piperid-4-yl] methylamine;
  - N- (8-Methoxy-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- (1-phenylpiperid-4-yl) methylamine; N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (1, 4-benzodioxan-5-yl) piperid-4yl] methylamine;
  - 1- [1- (1, 4-Benzodioxan-2-ylmethyl) piperid-4-yl]-N- (2-methoxyphenyl) methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (4-methoxyphenyl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (3-methoxyphenyl) piperid-4-yl] methylamine;
  - N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-chlorophenyl) piperid-4-yl] methylamine;
  - N- (5-Fluoro-1, 4-benzodioxan-2-ylmethyl)-l- [l- (2-methoxyphenyl) piperid-4yl] methylamine;

## $a^1$

- N- (8-Fluoro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
  - 1- [1- (2, 3-Dihydrobenzo [b] furan-7-yl) piperid-4-yl]-N- (8-methoxy-1, 4-benzodioxan-2- ylmethyl) methylamine;
- N- (6-Chloro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
- N- (7-Chloro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
- N- (8-hydroxy-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine; and

pharmaceutically acceptable salts thereof in the form of individual enantiomers, racemates, or other mixtures of enantiomers.

- 18. A method according to claim 14 wherein the compounds of formula 1 are selected from:
  - (S)- (-)-N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4- yl] methylamine;
  - (R)- (+)-N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl] methylamine;
  - (-)-N- (1, 4-Benzodioxan-2-ylmethyl)-1- [1- (pyrid-2-yl) piperid-4-yl] methylamine dihydrochloride; and
  - (+)-N-(1, 4-Benzodioxan-2-ylmethyl)-1-[1-(pyrid-2-yl) piperid-4-yl] methylamine dihydrochloride.
- 19. A method according to claim 14 wherein the compounds of formula 1 are selected from:
  - N- (7-Chloro-1, 4-benzodioxan-2-ylmethyl)-1- [1- (2-methoxyphenyl) piperid-4yl]methylamine; and

pharmaceutically acceptable salts thereof in the form of individual enantiomers, racemates, or other mixtures of enantiomers.

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20. A method for reducing cravings to food or an addictive substance, comprising:

administering a therapeutically effective amount of a compound of formula 1, together with a pharmaceutically acceptable diluent or carrier in reducing cravings to food or an addictive substance.

### Remarks

Claims 2-20 have been amended and claim 23 has been canceled. Support for "administering a therapeutically effective amount" can be found on page 7, line 25 and pages 8-12 of the above application.

### Conclusion

All claims presently in the application are believed to be allowable over the art of record and early notice to that effect is respectfully solicited. Please charge any additional fee required for the timely consideration of this application to Deposit Account No. 19-4972.

Respectfully submitted,

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